Solar System ICES

Earth	**H_2O**
Mars	**H_2O**, CO_2
Asteroids	**H_2O** is seen in some asteroids, as is ice with a C-H infrared signature
Jupiter	
Io	SO_2, SO_3, H_2S?, H_2O?
Europa	**H_2O**, SO_2, SH, CO_2, O_2, HC, XCN, H_2O_2, H_2SO_4, carbonate salt, hydrous sulfate
Ganymede	**H_2O**, SO_2, SH, CO_2, HC, XCN, O_2, O_3, hydrated and hydroxylated minerals
Callisto	**H_2O**, SO_2, SH, CO_2, HC, XCN, hydrated and hydroxylated minerals
Saturn	
Mimas	**H_2O**
Enceladus	**H_2O**
Tethys	**H_2O**
Dione	**H_2O**, C, HC, O_3
Rhea	**H_2O**, HC?, O_3
Hyperion	**H_2O**
Iapetus	**H_2O**, C, HC, H_2S?
Phoebe	**H_2O**, CO_2, CN, CH
Titan	H_2O, $C_2(CN)_2$
Rings	**H_2O**, HC?
Uranus	
Miranda	**H_2O**, NH_3 (NH_3 hydrate?), hydroxylated silicates
Ariel	**H_2O**, CO_2, OH?
Umbriel	**H_2O**
Titania	**H_2O**, C, HC, OH?
Oberon	**H_2O**, C, HC, OH?
Neptune	
Triton	N_2, CH_4, CO, CO_2, H_2O
Pluto	N_2, CH_4, CO, H_2O
Charon	**H_2O**, NH_3 (NH_3 hydrate?)
Kuiper Belt Objects	**H_2O** is seen on some Kuiper Belt objects; NH_3 is seen on Quaoar
Comets	**H_2O** and a variety of coma (gas-phase) molecules

NOTES: HC = hydrocarbon of unknown composition; XCN = contribution from a chemical species with a C-N triple bond; SH = contribution from a chemical species with an S-H single bond

http://www-691.gsfc.nasa.gov/cosmic.ice.lab/ Jan., 2006